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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,058	03/16/2001	Jonathan C. Kagle	03797.00023	4681
28319	7590	11/14/2006	EXAMINER	
BANNER & WITCOFF LTD., ATTORNEYS FOR CLIENT NOS. 003797 & 013797 1001 G STREET , N.W. SUITE 1100 WASHINGTON, DC 20001-4597			STORK, KYLE R	
			ART UNIT	PAPER NUMBER
			2178	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/809,058	KAGLE ET AL.	
	Examiner	Art Unit	
	Kyle R. Stork	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 September 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 7-9,22-24,32-51,53 and 59-61 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 7-9,22-24,32-44,46,48-51,53 and 59-61 is/are rejected.
- 7) Claim(s) 45 and 47 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This final office action is in response to the amendment filed 25 September 2006.
2. Claims 7-9, 22-24, 32-51, 53, and 59-61 are pending. Claims 59-61 are newly added. Claims 7, 22, and 32 are independent claims. The rejection of claims 7-9, 22-4, 36, 45, and 47 under 35 USC 112 have been withdrawn as necessitated by the amendment. The rejection of claims 45 and 47 have been withdrawn as necessitated by the amendment.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-9, 22-24, 32-44, 46, 51, and 53 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Haeberli (US 7016869, filed 28 April 2000), and further in view of Bhukhanwala (US 5831617, patented 3 November 1998).

As per independent claim 7, Haeberli discloses a method comprising:

- Receiving a multimedia object having an associated unique identifier, metadata and history comprising a plurality of nodes and a plurality of vectors defining relationships between the plurality of nodes (column 3, lines 21-38: Here, an image is the multimedia object. Associated with the image are metadata and history, which include the current state of the image and past states of the image:

Figure 17A: Here, each image has a vector (no border, black line, white) applied to the image. This vector describes the change in the image from the original image)

- Updating the metadata and history of the multimedia object to include a node corresponding to a change a vector corresponding to the relationship between the received multimedia object and the modified multimedia object; and updating metadata associated with the vector, the metadata describing, via the metadata, the modification performed to arrive at the multimedia object (column 3, lines 21-38; column 23, lines 1-30: Here, changing the color of a border is stored within the metadata and history. The record (vector) contains information indicating the attribute that was changed. The value of the attribute before the change, and the value of the attribute after the change)

Haeberli fails to specifically disclose assigning a new unique identifier to a multimedia object responsive to the multimedia object being modified. However, Bhukhanwala discloses assigning a new unique identifier to multimedia objects responsive to the multimedia object being modified (column 5, lines 26-43: Here, when a file is saved, it does not overwrite the previous version of the file. Instead, a new version, which inherently has a unique identifier, is created). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Bhukhanwala with Haeberli, since it would have allowed a user to quickly browse through the version history of a multimedia object (Bhukhanwala: column 2, line 57-column 3, line 6).

As per dependent claim 8, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 7, and the same rejection is incorporated herein. Haeberli discloses storing the metadata and history (column 3, lines 21-38; column 23, lines 1-30). Bhukhanwala further discloses storing the associated unique identifier, the new unique identifier (column 2, lines 57- column 3, line 6; column 5, lines 26-43). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Bhukhanwala with Haeberli, since it would have allowed a user to quickly browse through the version history of a multimedia object (Bhukhanwala: column 2, line 57- column 3, line 6).

As per dependent claim 9, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 8, and the same rejection is incorporated herein. Haeberli further discloses tracking the history of the multimedia object via the metadata and history (column 3, lines 21-38; column 23, lines 1-30). Bhukhanwala further discloses tracking the history via the associated unique identifier and the new unique identifier (column 2, line 57- column 3, line 6). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Bhukhanwala with Haeberli, since it would have allowed a user to quickly browse through the version history of a multimedia object (Bhukhanwala: column 2, line 57- column 3, line 6).

As per claims 22-24, the applicant discloses the limitations substantially similar to those in claims 7-9 respectively. Claims 22-24 are similarly rejected under Haeberli and Bhukhanwala.

As per independent claim 32, Haeberli discloses a method comprising:

- Providing a multimedia object a history comprising a plurality of nodes and a plurality of vectors defining relationships between the plurality of nodes (column 3, lines 21-38: Here, an image is the multimedia object. Associated with the image are metadata and history, which include the current state of the image and past states of the image; Figure 17a)
- Updating the metadata and history of the multimedia object to include a node corresponding to a change a vector describing, via the metadata, the modification performed to arrive at the multimedia object (column 3, lines 21-38; column 23, lines 1-30: Here, changing the color of a border is stored within the metadata and history. The record (vector) contains information indicating the attribute that was changed. The value of the attribute before the change, and the value of the attribute after the change)

Haeberli fails to specifically disclose assigning a multimedia object a first unique identifier and assigning a new unique identifier to a multimedia object responsive to the multimedia object being modified. However, Bhukhanwala discloses assigning a unique identifier to a multimedia object, and assigning a new unique identifier to multimedia objects responsive to the multimedia object being modified (column 5, lines 26-43: Here, when a file is saved, it does not overwrite the previous version of the file. Instead, a new version, which inherently has a unique identifier, is created). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Bhukhanwala with Haeberli, since it would have allowed a user to quickly

browse through the version history of a multimedia object (Bhukhanwala: column 2, line 57- column 3, line 6).

As per dependent claim 33, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Haeberli discloses associating metadata with the modified multimedia object (column 3, lines 21-38).

As per dependent claim 34, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 33, and the same rejection is incorporated herein. Haeberli discloses wherein the metadata describes how the multimedia object differs from the modified multimedia object (column 23, lines 1-30).

As per dependent claim 35, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 33, and the same rejection is incorporated herein. Haeberli discloses wherein the metadata describes the modification applied to the multimedia object to obtain the modified multimedia object (column 23, lines 1-30).

As per dependent claim 36, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Haeberli fails to disclose storing the identifiers separately from the objects in a database system. However, it was notoriously well known in the art at the time of the invention that storing information separately can make data access more efficient, based upon a database design and improve information security. It would have been obvious to one of ordinary skill in the art at the time of the invention to store information separately and thereby make data access more efficient and improve information security.

As per dependent claim 37, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Bhukhanwala discloses assigning a unique identifier to a multimedia object, and assigning a new unique identifier to multimedia objects responsive to the multimedia object being modified (column 5, lines 26-43). By assigning the objects unique identifiers, the unique identifiers are associated with the objects. Therefore, the unique identifiers are inherently stored with the objects.

As per dependent claim 38, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Haeberli further discloses an operating system (column 24, line 64- column 25, line 4).

As per dependent claim 39, Haeberli and Bhukhanwala disclose the limitations similar to those in claims 32, and the same rejection is incorporated herein. Haeberli further discloses wherein updating the history includes creating a vector that describes the relationship between the multimedia objects and the associated multimedia object (column 23, lines 1-30).

As per dependent claim 40, Haeberli and Bhukhanwala disclose the limitations similar to those in claims 39, and the same rejection is incorporated herein. Haeberli discloses associating metadata with the vector, the metadata describing the modification applied to the multimedia object to obtain the modified multimedia object (column 23, lines 1-30).

As per dependent claim 41, Haeberli and Bhukhanwala disclose the limitation similar to those in claim 32, and the same rejection is incorporated herein. Haeberli fails

to specifically disclose that the multimedia object must be received prior to assigning the first unique identifier to the multimedia object. However, it was notoriously well known in the art at the time of the invention that having an object in memory allows determination of its attributes, which aid in providing it with an identifier. It would have been obvious to one of ordinary skill in the art at the time of the invention to receive the multimedia object prior to assigning the first identifier, because it would allow determination of the object's attributes, which would aid in providing it with an identifier.

As per dependent claim 42, Haeberli and Bhukhanwala disclose the limitations similar to those in claims 32, and the same rejection is incorporated herein. Haeberli discloses wherein the multimedia object is an image (column 1, lines 25-34).

As per dependent claim 43, Haeberli and Bhukhanwala disclose the limitations similar to those in claims 42, and the same rejection is incorporated herein. Haeberli discloses wherein the history represents evolution of the image (column 3, lines 21-38).

As per dependent claim 44 Haeberli and Bhukhanwala disclose the limitations similar to those in claims 32, and the same rejection is incorporated herein. Haeberli discloses storing portions of the history with the modified multimedia object (column 3, lines 21-38).

As per dependent claim 46 Haeberli and Bhukhanwala disclose the limitations similar to those in claims 32, and the same rejection is incorporated herein. Haeberli discloses transferring portions of the history with the modified multimedia object (column 3, lines 21-38).

As per dependent claim 51, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Haeberli further discloses associating the updated history with the modified multimedia object (column 23, lines 1-30).

As per dependent claim 53, the applicant discloses the limitations substantially similar to those in claim 32. Claim 53 is similarly rejected.

5. Claims 48-49 remain rejected under 35 U.S.C. 103(a) as being anticipated by Haeberli and Bhukhanwala, further in view of Hecht (US 5535322, filed 27 October 1992).

As per dependent claim 48, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Haeberli fails to specifically disclose use of an API to retrieve and store multimedia objects. However, Hecht discloses an application program interface for other software to retrieve or store the multimedia object or the modified multimedia object, in the Abstract, lines 1-40, in that the invention is a workflow system that fits this description. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hecht with Haeberli, since it would have allowed a user to store and retrieve objects (Hecht: abstract).

As per dependent claim 49, Haeberli, Bhukhanwala, and Hecht disclose the limitations similar to those in claim 48, and the same rejection is incorporated herein. Bhukhanwala discloses associating the original object with the modified object (column

2, line 57- column 3, line 6). Hecht discloses the use of an application program interface (Abstract, lines 1-40). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hecht with Haeberli, since it would have allowed a user to interact with an operating system.

6. Claim 50 remain rejected under 35 U.S.C. 103(a) as being anticipated by Haeberli and Bhukhanwala, further in view of Chan (US 5781635, filed 29 December 1995).

As per dependent claim 50, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Haeberli fails to specifically disclose generating the second unique identifier by one of hashing and cyclic redundancy checking of data representing the modified multimedia object. However, Chan discloses determining identifiers by using hashing in col. 2, lines 60-67. It would have been obvious to one of ordinary skill in the art at the time of the invention to determine identifiers by using hashing because this is an accepted part of using digital signatures.

7. Claims 59-61 are rejected under 35 U.S.C. 103(a) as being anticipated by Haeberli and Bhukhanwala, further in view of Hamburg et al. (US 7062497, filed 22 January 1998, hereafter Hamburg).

As per dependent claim 59, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Haeberli fails

to specifically disclose wherein the history is non-linear. However, Hamburg discloses a non-linear history for modifications (column 4, lines 24-35 and lines 44-56). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamburg with Haeberli, since it would have allowed a user to remove a branch from the history, and maintain the children of the branch (column 6, lines 34-59).

As per dependent claim 60, Haeberli, Bhukhanwala, and Hamburg disclose the limitations similar to those in claim 59, and the same rejection is incorporated herein. Hamburg further discloses wherein the history of the modified multimedia object indicates that the object is a combination of a plurality of different multimedia objects (column 5, lines 17-34). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamburg with Haeberli, since it would have allowed a user to remove a branch from the history, and maintain the children of the branch (column 6, lines 34-59).

As per dependent claim 61, Haeberli and Bhukhanwala disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Haeberli fails to specifically disclose wherein the history of the modified multimedia object comprises a node corresponding to a second multimedia object not related to the modified multimedia object (column 5, lines 17-34). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamburg with Haeberli, since it would have allowed a user to remove a branch from the history, and maintain the children of the branch (column 6, lines 34-59).

Allowable Subject Matter

8. Claims 45 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed 25 September 2006 have been fully considered but they are not persuasive.

The applicant argues that the prior art of record fails to disclose "a history comprising a plurality of nodes and a plurality of vectors defining relationships between the plurality of nodes (page 9)." However, the examiner respectfully disagrees. Haeberli discloses history comprising a plurality of nodes and a plurality of vectors defining relationships between the plurality of nodes (column 3, lines 21-38: Here, an image is the multimedia object. Associated with the image are metadata and history, which include the current state of the image and past states of the image: Figure 17A: Here, each image has a vector (no border, black line, white) applied to the image. This vector describes the change in the image from the original image).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle R. Stork whose telephone number is (571) 272-4130. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2178

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kyle R Stork
Patent Examiner
Art Unit 2178

krs



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